



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS



System of
Environmental
Economic
Accounting

System of Environmental-Economic Accounting 2012 – Experimental Ecosystem Accounting Revision

First Global Consultation on:

Chapter 3: Spatial units for Ecosystem Accounting

Chapter 4: Accounting for Ecosystem Extent

Chapter 5: Accounting for Ecosystem Condition

Comments Form

Deadline for responses: 30 April 2020

Send responses to: seea@un.org

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The comment form has been designed to facilitate the analysis of comments. There are nine guiding questions in the form, please respond to the questions in the indicated boxes below. To submit responses please save this document and send it as an attachment to the following e-mail address: seea@un.org.

All documents can be also found on the SEEA EEA Revision website at:
<https://seea.un.org/content/seea-experimental-ecosystem-accounting-revision>

In case you have any questions or have issues with accessing the documents, please contact us at seea@un.org

Question 1: Do you have any comments on the definition and description of ecosystem assets and ecosystem accounting areas and the associated measurement boundaries and treatments?

Click here and start typing (The length of your response is not limited by this text box.)

Question 2. Do you have any comments on the use of the IUCN Global Ecosystem Typology as the SEEA Ecosystem Type Reference Classification?

Click here and start typing (The length of your response is not limited by this text box.)

Question 3. Do you have any comments on the recording of changes in ecosystem extent and ecosystem condition, including the recording of ecosystem conversions, as described in chapters 4 and 5?

Click here and start typing (The length of your response is not limited by this text box.)

Question 4. Do you have any comments on the three-stage approach to accounting for ecosystem condition, including the aggregation of condition variables and indicators?

Click here and start typing (The length of your response is not limited by this text box.)

Question 5. Do you have any comments on the description and application of the concept of reference condition and the use of both natural and anthropogenic reference conditions in accounting for ecosystem condition?

Click here and start typing (The length of your response is not limited by this text box.)

Question 6. Do you have any comments on Ecosystem Condition Typology for organising characteristics, data and indicators about ecosystem condition?

Question 7. Do you have any other comments on Chapter 3?

Click here and start typing (The length of your response is not limited by this text box.)

Question 8. Do you have any other comments on Chapter 4?

Click here and start typing (The length of your response is not limited by this text box.)

Question 9. Do you have any other comments on Chapter 5?

This note responds to the global consultation on the revision to Chapter 5 of the UN System of Environmental-Economic Accounting - Experimental Ecosystem Accounting guidance (2012) which relates to accounting for ecosystem condition. The comments in this document are based on the views of the author only based on his experience of developing ecosystem accounts in the UK and Australia over the last decade.

The first point of commentary is in relation to the classification / framework that is being proposed in relation to the metrics of relevance to include in an ecosystem condition account.

The guidance as it currently reads focuses on ecological characteristics of ecosystems providing a framework to capture the abiotic, biotic and landscape components (characteristics, variables, indicators and indexes) of ecosystems (at both system and individual scales). There appears to be no acknowledgement of the notion that “asset condition” within the context of ecosystem accounts is measured through information on the broad range of characteristics that determine the capacity of assets to support the delivery of socio-economic benefits^{1,2} not just ecological characteristics. On this basis it follows that:

1. Whilst ecosystem accounts *can* include conventional ecological definitions of ecosystem condition (such as those set out in the current SEEA-EEA revision guidance) this should occur where it is understood (e.g. based on scientific literature) or reasonable to assume that ecological condition corresponds to ecosystem productivity³. The logic of the link between asset characteristics and the productive capacity of ecosystems should be made clear when including specific metrics in the condition account (e.g. tree species and age are important characteristics in determining the provision of carbon capture and storage by woodland), see Table 1;

¹ efttec et al (2017) Developing Urban Natural Capital Accounts for the UK. [Available Online: http://randd.defra.gov.uk/Document.aspx?Document=14143_UrbanNC_Account_FinalReportAugust2017.pdf]

² Defra and ONS (2017) Principles of Natural Capital Accounting [Available Online: <https://www.ons.gov.uk/economy/environmentalaccounts/methodologies/principlesofnaturalcapitalaccounting>]

³ Mace (2019) The ecology of natural capital accounting [Available Online: <https://academic.oup.com/oxrep/article-abstract/35/1/54/5267893?redirectedFrom=fulltext>]

2. Information on the other “non-ecological” components that play a critical role in co-producing ecosystem services should be included in ecosystem accounts, including:

- “Socio-economic” condition metrics: which capture the human interaction with the environment. This is mostly associated with the location of natural assets relative to beneficiaries. For example, accessible green space within 400m of residence could be a relevant metric to understand the “condition” of the environment for recreation opportunities;
- Non-natural capital assets characteristics: which combine with environmental assets to support the delivery of socio-economic benefits. For example, paths and bridleways in parks combine with natural capital assets to support the provision of recreational opportunities (i.e. the visitor experience to the natural environment is enhanced/enabled by other (non-natural) capitals).

The status of these “non-ecological” metrics is useful to understand from a policy and management perspective because it is critical in determining the productive value of ecosystem services produced from ecosystem assets.

The second point of commentary is in relation to the conceptual framing that informs the scope of indicators / metrics to include within an ecosystem condition account.

SEEA is based on the notion of accounting for stocks (natural assets) and flows (ecosystem services) in order to account for the contribution of the natural environment to economic activity. The condition of stocks is therefore relevant in the context of the provision of ecosystem services (as mentioned in above text).

However, the authors experience is that in many (most) cases of ecosystem account development, the primary rationale for the account is to inform policy decisions and accounts have been developed with a focus on policy relevance rather than (or as well as) supplementing GDP accounts as per SEEA.

Given this broader policy interest in the use of the SEEA framework it would be useful if SEEA Revision guidance could consider if/how to account for wider metrics/indicators of natural environment condition through other conceptual framings (beyond ecosystem services) that could be useful for informing policy. For example, the conceptual framing developed by the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) focuses on “nature’s contribution to people” which is a broader framing than ecosystem services that includes dis-benefits (e.g. forest fires, pests and disease) and environmental externalities (e.g. pollution/littering). The potential policy interest in reporting on these dis-benefits and externalities is because these align with what people *experience* and is where policy action is typically targeted (i.e. to tackle dis-benefits and/or externalities). Including information on these pressures in an ecosystem account would mean a divergence from a focus solely on quantifying and monetising the value of the natural environment for purpose of developing “satellite accounts” to national GDP accounts, but would not preclude this.

